ABSTRACT OF THE DISCLOSURE

Method and apparatus for handling communication requests at a server without context switching. An application protocol subsystem and protocol modules are disposed within an operating system kernel at a server. The protocol subsystem creates an "in-kernel" protocol stack that stores information regarding application protocol requests, such as HTTP and FTP requests, in a kernel request structure. A user space application can then continue execution while the operating system responds to the application protocol request without context switching. In this way, application protocol requests received over a network are handled and responded to by the server without causing a context switch.